

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant :	Moshe Rock et al.	Art Unit :	1771
Serial No. :	09/982,720	Examiner :	Jenna-Leigh Befumo
Filed :	October 18, 2001	Conf. No. :	8722
Title :	DOUBLE-FACE VELOUR FABRIC ARTICLES HAVING IMPROVED DYNAMIC INSULATION PERFORMANCE		

**Mail Stop Appeal Brief - Patents**

Commissioner for Patents  
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**REPLY BRIEF**

Pursuant to 37 C.F.R. § 41.41, Applicants respond to the Examiner's Answer mailed February 26, 2007 as follows.

## **(1) STATUS OF CLAIMS**

Claims 1-27, 30, and 37 are pending.

Claims 1 is in independent form.

Claims 1, 14, 15, 30, and 37 are previously presented.

Claims 2-13, 16-18, 24 and 25 are original.

Claims 28-29, 31-36 and 38-54 are cancelled.

Claims 19-23, 26 and 27 are withdrawn as being directed to a non-elected invention.

## **(2) GROUNDS OF REJECTION**

(A) Claims 1-9, 16-18, 25, 30 and 37 are rejected under 35 U.S.C. §103(a) as being obvious and therefore unpatentable over U.S. Patent 4,103,518 to Lombardi et al. ("Lombardi") in view of U.S. Patent 3,837,943 to Ploch et al. ("Ploch").

(B) Claims 10-13 are rejected under 35 U.S.C. §103(a) as being obvious and therefore unpatentable over Lombardi in view of Ploch, and further in view of U.S. Patent 5,557,950 to Richards et al. ("Richards").

(C) Claim 24 are rejected under 35 U.S.C. §103(a) as being obvious and therefore unpatentable over Lombardi in view of Ploch, and further in view of U.S. Patent 5,520,022 to Callaway ("Callaway").

(D) Claims 14 and 15 are rejected under 35 U.S.C. §103(a) as being obvious and therefore unpatentable over Lombardi in view of Ploch and Richards, and further in view of U.S. Publication No. 2002/0124365 to Wood et al. ("Wood").

### (3) ARGUMENT

Applicants respectfully disagree with Examiner's statements regarding the appeal brief.

***(A) Claims 1-9, 16-18, 25, 30 and 37 are not obvious under 35 U.S.C. §103(a) over Lombardi in view of Ploch.***

In the Examiner's Answer, Examiner contends that the term "seams," as used by Ploch, refers to "multiple rows of stitching yarns which attach loop yarns to the base fabric, by being knitted into the base fabric in a repeating pattern." Applicants respectfully disagree. Examiner is mischaracterizing the reference by confusing "stitching onto" with "knitting." Ploch discloses a method of producing compound fabrics having a pre-formed base fabric and yarns or fibrous material stitched onto a surface of the base fabric in longitudinally extending parallel seams. (Col. 1, lines 1-11, 27-28). The term "seams," as used by Ploch, refers to parallel rows of chain stitched seams formed to bind overlying yarns to a base fabric. (Col. 1, lines 1-11, 27-28). Ploch discloses stitching onto a pre-formed base fabric with a heat sensitive thread, not knitting (e.g. interweaving stitch and loop yarns) the entire base fabric with a heat sensitive filament stitch yarn as claimed by Applicants.

Examiner contends that Ploch discloses "using a heat sensitive stitching thread helps makes (*sic*) a stronger bond between the loop yarns and the base layer and improves the stability of the entire fabric." Again, Examiner is mischaracterizing Ploch. Ploch does not disclose using a heat sensitive stitching thread with respect to interwoven stitch yarns and loop yarns. Instead, as explained above, Ploch only discloses a method of producing compound fabrics having yarns or fibrous material stitched (fastened) to a pre-formed base fabric.

Examiner concedes that the limitations of fabric permeability are not disclosed in Lombardi or Ploch, but contends that it is reasonable to presume that such limitations would be met by the combination of the two references. Applicant respectfully disagrees. Neither Lombardi, nor Ploch discloses, suggests, or provides any motivation of using a heat sensitive material to form a face of a knitted fabric or to increase tortuosity of air flow paths through a knitted fabric body. The limitations of fabric permeability are not an obvious result.

Applicants submit that the Examiner's assertions of obviousness are conclusory statements improperly established by using hindsight reconstruction of the claimed invention. "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." MPEP 2143.03. Examiner has not met the burden of citing references that disclose or suggest the claimed invention. Instead, Examiner states, with no support from any references, that a person of ordinary skill in the art would desire improved bond strength in knit pile fabrics and would improve the bond strength between the pile yarns and base fabric by using heat sensitive materials interlocked by knitting and physically bonded to each other as well. Examiner fails to explain how the cited references would make this obvious, and only makes conclusory statements. Furthermore, Examiner mischaracterizes Ploch by stating, "Ploch et al. teaches that heat-sensitive yarns in the base layer of a composite fabric can improve the stability and wear resistance of the fabric, can more strongly bond the pile material to the base layer, and can improve the bulk of the fabric." Ploch does not disclose heat-sensitive yarns in the base layer of a composite fabric. Instead, Ploch discloses stitching onto a pre-formed base fabric with a heat sensitive thread.

Examiner states that "there is nothing in Ploch et al. or Lombardi et al. that teaches away from using a heat sensitive yarn as a ground yarn." This is not the standard for determining obviousness under 35 U.S.C. §103(a). Examiner has the burden of proof and has failed to explain (without conclusory statements) how any of the cited references would render the claims obvious. Therefore, it would not have been obvious for a person of ordinary skill in the art, at the time of invention, to use the heat sensitive stitching / fastening thread disclosed in Ploch as ground yarns in the knitted fabric disclosed in Lombardi to form a face of a knitted fabric or increase tortuosity of air flow paths through the knitted fabric body formed by interstices defined among the filament stitch yarn and the filament loop yarn of the knitted fabric body.

***(B) Claims 10-13 are not obvious under 35 U.S.C. §103(a) over Lombardi in view of Ploch, and further in view of Richards.***

Examiner concedes that Lombardi and Ploch do not disclose using elastomeric filament stitch yarn. However, Examiner contends that it would have been obvious for a person of

ordinary skill in the art, at the time of invention, to combine the elastic yarns of Richards that appear only at the technical face of the fabric with the heat sensitive stitching / fastening thread disclosed in Ploch and use the combined yarn and thread as ground yarns in the knitted fabric disclosed in Lombardi to form a face of a knitted fabric. Richards and Ploch do not provide any suggestion or motivation of using a filament stitch yarn comprising both an elastomeric material that stretches and a heat sensitive material that shrinks. Obviousness cannot be established by using the Applicants' application as a template to fit together independent pieces of prior art. *See e.g. Interconnect Planning Corp. v. Feil*, 774 F.2d 1132; *Loctite Corp. v. Ultraseal Ltd.*; 781 F.2d 861; and *In re Fine*, 837 F.2d 1071. Accordingly, claims are not disjointed lists of elements, but present an invention that must be **considered as a whole**. *See e.g. MPEP 2141.02*; and *Stratoflex, Inc. v. Aeroquip*, 713 F.2d 1530. There is no motivation disclosed in either reference to combine Richards and Ploch. Use of an elastic (stretchable) yarn, as disclosed in Richards, is inconsistent with Ploch's objective of tight seams. It would not have been obvious for a person of ordinary skill in the art, at the time of invention, to make a double-face velour fabric article including a knitted fabric body having a technical face, formed by a filament stitch yarn, and a technical back, formed by a filament loop yarn, where the filament stitch yarn comprises heat sensitive material and an elastomeric material.

***(C) Claim 24 are not obvious under 35 U.S.C. §103(a) over Lombardi in view of Ploch, and further in view of Callaway.***

Examiner concedes that Lombardi fails to disclose a textured filament loop yarn, but contends that it would have been obvious to texture the yarn in a manner disclosed in Callaway. However, Callaway does not remedy the inadequacies of Lombard and Ploch as references with respect to claim 1, as explained above.

***(D) Claims 14 and 15 are not obvious under 35 U.S.C. §103(a) over Lombardi in view of Ploch and Richards, and further in view of Wood.***

These claims depend from claim 1 and thus are patentable for at least the same reasons explained above. Moreover, none of Richards, Callaway, or Wood provides motivation for use

of a heat sensitive filament stitch yarn to form a knitted fabric body, where the heat sensitive material of the stitch yarn responds to application of heat during processing to increase tortuosity of the air flow paths, as featured in the pending claims, nor are these references relied upon for such a teaching.

#### **(4) CONCLUSION**

For these reasons, and the reasons stated in the Appeal Brief, Applicants submit that the final rejection should be reversed and that all claims under appeal are patentable. It is not believed that any other charges are due, but please apply any such charges to deposit account 06-1050, referencing Attorney Docket No. 22436-025001.

Respectfully submitted,

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